

XXXII.—*Diagnoses of new Forms of Mollusks collected at Cape St. Lucas by Mr. J. Xantus.* By PHILIP P. CARPENTER, B.A., Ph.D.

THE specimens here described belong to the Museum of the Smithsonian Institution, Washington, D. C. The first available duplicates will be found in the British Museum or in the Cumingian Collection. An account of the labours of Mr. Xantus will appear in the forthcoming volume of British Association Reports; and detailed notes on the species may be consulted in the American scientific periodicals for the current year.

Genus ASTHENOTHÆRUS\*.

Testa extus "*Thraciæ*" similis: intus cardine edentulo, haud spatulato; cartilagine infra umbones sita.

1. *Asthenothærus villosior.*

A. testa inæquivalvi, inæquilaterali, umbonibus ad trientem longitudinis sitis; tenuissima, alba, (sub lente) omnino minutissima et creberrime pustulosa; rugis incrementi obtusissimis, irregularibus, maxime t. juniore, ornata; epidermide tenui, pallide olivacea induta; parte postica truncata, parum hiante; antica valde rotundata; marginibus dorsalibus et ventrali parum excurvatis; umbonibus angustissimis; regionibus lunulari et nymphali subcarinatis: intus, margine cardinali utriusque valvæ acuto; ligamento inconspicuo; cartilagine subspongiosa, satis elongata, postice deflecta; fovea haud indentata; cicatricibus adductorum parvis, subrotundatis; sinu pallii majore, ovali, ad dimidium interspatii porrecto. Long. .38, lat. .26, alt. .14 poll.†

2. *Solemya valvulus.*

S. testa minore, tenuissima, diaphana, vix testacea, cornea, pallidiore, lineis tenuibus, distantibus, fuscis, radiatim ornata; postice tenuiter radiatim striata; tumente, satis elongata, marginibus antico et postico regulariter excurvatis; umbonibus vix conspicuis; lineis anticis divaricantibus, extus parentibus, intus lacunam cartilagineam definientibus; cardine edentulo; ligamento postice elongato, antice curto, latiore, bifurcato; cicatricibus adductorum subrotundatis. Long. .85, lat. .25, alt. .14 poll.

3. *Tellina (Peronæoderma) ochracea.*

T. testa majore, parum inæquilaterali, tenui, satis planata; carneo-ochracea, intus intensiore; lævi, nitida, marginem versus striis incrementi; postice vix radiatim striatula; ventraliter antice valde excurvata, postice vix angulata; marginibus dorsalibus ob-

\* Ἀσθενής, weak; θαίρος, hinge.

† The measures of length are taken from the anterior to the posterior margins.

tuse angulatis, umbonibus conspicuis; ligamento tenui et cartilagine subinternis; nymphis intortis: dent. card. utriusque valvæ ii., quarum i. bifidus; dent. lat. valvæ dextræ ii.; sinu pallii irregulariter ovali, per duos trientes interstitii porrecto; cicatr. adduct. subovatis, nitidissimis. Long. 1·9, lat. 1·4, alt. ·44 poll.

4. *Psammobia* (? *Amphichæna*) *regularis*.

*P.* testa minore, regulariter ovali, subæquilaterali; violacea, plus minusve radiata seu maculata; lævi, striolis incrementi ornata; epidermide tenui, flavido-olivacea induta, postice rugulosa; marginibus undique regulariter excurvatis; umbonibus vix projectis; ligamento conspicuo: intus dent. card. ii.—i., haud bifidis; cicatr. adduct. postica rotundata, antica ovali; sinu pallii elongato, haud incurvato, per duos trientes interstitii porrecto. Long. 1·05, lat. ·5, alt. ·26 poll.

5. *Callista pollicaris*.

*C.* testa magna, ventricosa, solidiore; epidermide tenuissima induta; sordide albida, umbonibus rufo-fuscis; (t. adolescente) punctulis crebris rufo-fuscis, et tæniis paucis circa nymphas ornata; lævi, striis incrementi exceptis; postice, et paululum antice, quasi pollice impresso notata; latiore, antice producta, sed haud angulata; postice unda depressa, supra nymphas radiante, inter costas duas obsoletas sinuante, margine subtruncato; marginibus ventrali regulariter excurvato, dorsali rectiore; lunula elongata, linea impressa definita, medio tumente, postice flaccida: intus candida; dent. card. normalibus; dente laterali valvæ dextræ postico, valvæ sinistræ antico, usque ad extremitatem lunulæ porrecto; cicatr. adduct. subrotundatis; sinu pallii magno, rotundato, usque ad medium interstitii porrecto. Long. 2·58, lat. 2·25, alt. 1·43 poll.

Figured by Mr. Reeve (Conch. f. 45) as "*Dione prora*, var." The above diagnosis proves it to be a distinct and (considering the general similarity of the thin, colourless, inflated group) a well-marked species.

6. *Callista* (? *pannosa*, var.) *puella*.

*C.* testa "*C. pannosæ*" simili, sed multo minore, tenuiore, plerumque latiore; sinu pallii majore, eleganter incurvato; dent. card. multo tenuioribus, lat. ant. magis elongato; lamina cardinali umbones versus sinuata: colore maxime variante; nonnunquam ut in *C. pannosa* triangulariter maculata; plerumque ut in *Tapete virginea* notata; interdum albida, seu aurantia, seu fusca, haud maculata; rarius ut in *Tapete fuscolineata* penicillata; rarissime paucistrigata, seu maculis paucissimis. Long: ·66, lat. ·5, alt. ·32 poll.

Variat t. transversa. Variat quoque t. subtrigona, et formis intermediis.

Quoted by Mr. Reeve, under *Dione pannosa*, as "*D. puella*, Cpr.;" but the name was only given in MS. in accordance with

Mr. Cuming's assertion that it was distinct. The colourless subtrigonal shells were regarded by Mr. Reeve as a separate species; but he did not allude to them in his monograph.

#### 7. *Levocardium apicinum*.

*L.* testa subtrigona, parva, tenuissima, nitidissima, subcompressa, epidermide tenui induta; radiis seu striis radiantibus nullis; striis concentricis satis regularibus, subobsoletis, t. jun. magis extantibus; umbonibus angustis, parum incurvatis; margine ventrali satis excurvato, antico parum producto, postico subtruncato, dorsalibus obtuse angulatis: colore valde variante; plerumque pallide viridi-cinereo, rufo-fusco seu angulatum tæniato seu maculato seu punctato; regione umbonali plerumque pallida, interdum rufo-fusca seu aurantiaca; parte postica haud intensiore: intus plerumque citrina, hepatico varie penicillata: dent. card. et lat. acutis, tenuibus; margine minutissime subobsoletim crenulato. Long. .55, lat. .5, alt. .3 poll.

Variat t. latiore. Variat quoque colore fere omnino hepatico, seu carneo, seu pallide aurantiaco, seu pallide cinereo, seu albedo: rarissime ut in *Tapete fuscolineata* ornata.

#### 8. *Lucina lingualis*.

*L.* testa solida, linguiformi, valde prolongata; plerumque aurantiaco-carnea, intus intensiore; lirulis concentricis obtusis crebre ornata; marginibus undique excurvatis; lunula minima, altissime excavata; parte postica obscure biangulata, seu subrotundata; umbonibus anticis, incurvatis; ligamento subinterno, lamina valida; dent. card. et lat. normalibus, validis; cicatr. adduct. posticis subovalibus, anticis satis elongatis; linea pallii lata, rugosa; margine interno crenulato. Long. .88, lat. .92, alt. .4 poll.

Variat t. minus prolongata. Variat quoque t. pallide viridi, seu pallide carnea, seu alba.

#### 9. ?*Crenella inflata*.

?*C.* testa valde inflata, minuta, albida, subrhomboideo-orbiculari; diagonaliter parum producta; marginibus subquadrangulatim rotundatis; umbonibus prominentibus, valde antice intortis; tota superficie ut in *C. decussata* sculpta, costulis crebris radiantibus æquidistantibus, hic et illic aliis intercalatis; lirulis concentricis decussantibus: intus margine dorsali brevissimo, arcuato, dentato; ligamento curtissimo, in fossa omnino interna, celata, lamina definiente, sito; lamina cardinali sub umbonibus intus porrecta, dentibus validis instructa; marginibus internis omnino crenatis; cicatr. adduct. subæqualibus, ventraliter sitis. Long. .1, lat. .12, alt. .09 poll.

Located provisionally in *Crenella* from its likeness to *C. decussata*, but with peculiarities of hinge and adductors which approach *Nuculina* on one side and *Cardilia* on another.

## Genus BRYOPHILA\*.

Animal Aviculidæum, viviparum : inter algas, etc., habitans.

Testa Pinnæformis, extus prismatica, intus subnacreæ : ligamentum solidum : umbones extantes, terminales, intus concavi.

10. *Bryophila setosa*.

*B.* testa parva, regulari ; cinerea, salmoneo seu chocolateo, intus subnacreo, exquisite tincta : t. juniore planata, semirobundata, dorsaliter recta, æquilaterali, conspicue punctata : t. adolescentæ subdiaphana : t. adulta solidiore ; umbonibus rectis, terminalibus, intus alte excavatis ; marg. dorsali brevior, recto ; antico recto ; ventrali et postico late rotundatis : extus epidermide subspongiosa vestita, radiis setarum subdistantibus, marginibus eleganter pectinatis : intus ligamento solido dorsaliter producto ; limbo pallii æqualiter prope marginem decurrente ; cicatr. adduct. submediana, inconspicua ; postice hiante ; antice propter byssum tenuem sinuata. Long. .13, lat. .2, alt. .1 poll.

Like a minute *Pinna*, or a transverse *Margaritiphora* without ears, or an *Isognomon* without pits. Differs from the other Aviculids in being viviparous, like some other minute bivalves.

11. ? *Atys casta*.

?*A.* testa elongata, tenui, subdiaphana, albida ; antrorsum paulum tumidiore ; spira celata, lacunata, (t. adultæ) haud umbilicata ; columella paulum intorta, effusa ; umbilico antico minimo ; labro postice producto, obtuse angulato ; tota superficie subtiliter spiratiter striatula. Long. .4, lat. .18 poll.

On the confines of the genus, related to *Cylichna*.

12. *Ischnochiton parallelus*.

*I.* testa ovata, subelevata (ad angulum 120°) ; rufo-fusca, olivaceo tincta ; valvis latis, marginibus parum rotundatis, interstitiis parvis ; valvis intermediis valde insculptis ; areis lateralibus serièbus granulorum a jugo radiantibus circiter vi. ; interdum irregularibus, granis rotundatis, separatis, extantibus ; areis centralibus clathris creberrimis, jugo parallelis, horridis, extantibus, interdum granulosis, ornatis ; valvis terminalibus serièbus granulorum, circ. xx., interdum bifurcantibus, ut in areis lateralibus, ornatis ; mucrone vix conspicuo ; limbo pallii angusto, pilulis furvicaceis creberrimis minutis conferto ; lobis valvarum bifidis, terminalibus fissuris circ. xi. a parte externa simplici disjunctis. Long. .7, lat. .48, alt. .16 poll.

Belongs to the group with minute setose scales.

13. *Ischnochiton* (? var.) *prasinatus*.

*I.* testa *I. parallelo* forma et indole simili, sed vivide viridi ; ar. diag. serièbus bullularum irregulariter ornatis ; ar. centr. clathris

\* Βρύον, sea-moss ; φίλος, loving.

valde extantibus, acutis, jugo obtuso parallelis, utroque latere circ. xvi.; valv. term. seriebus bullularum circ. xviii.; mucrone submediano, inconspicuo; umbonibus haud prominentibus; tota superficie minutissime granulosa: intus valvarum lobis mediarum i.-term. circiter x.-fissis; sinu lato, planato; suturis planatis, limbo pallii angusto, minutissime squamulis furvicaceis creberrime instructo; interdum pilulis intercalatis. Long. .8, lat. .4 poll., div. 125°.

14. *Ischnochiton serratus*.

I. testa parva, cinerea, olivaceo hic et illic, præcipue ad suturas, punctata, interdum sanguineo maculata; ovali, subdepressa, suturis indistinctis; tota superficie minutissime granulata; ar. diag. valde distinctis, costis latissimis obtusis ii.-v. munitis, interstitiis nullis; marginibus posticis eleganter serratis; ar. centr. costis acutis, parallelis, utroque latere circ. xii.; jugo obtuso, haud umbonato; costis transversis, subradiantibus, fenestrantibus, interstitiis impressis: mucrone mediano, obtuso; valv. term. costis obtusis, ut in ar. diag., circ. xx.: intus valvarum mediarum lobis bifissis, terminalium circ. ix.-fissis; lobis suturalibus magnis: limbo pallii squamis majoribus, imbricatis, vix striatulis. Long. .34, lat. .2 poll., div. 115°.

Differs from *Elenensis* in the sculpture of the terminal valves.

[To be continued.]

XXXIII.—On the Menispermaceæ.

By JOHN MIERS, F.R.S., F.L.S. &c.

[Continued from p. 135.]

4. TINOSPORA.

THE first outline of this genus was given in my "Remarks on *Menispermaceæ*," in 1851 (Ann. Nat. Hist.). It comprises a group of Asian and African plants, all of climbing growth, the type of which is the *Cocculus cordifolius*, DC.: the stems have a lax, splitting, membranaceous bark, often furnished with verrucose tubercles. Colebrook and Roxburgh relate, concerning some of the species mentioned below, that when any portion of their stems becomes severed, it sends out, even from the greatest height, a sprout which lengthens downwards till it reaches the ground, when it takes root, by which the severed portion continues to maintain its flourishing growth; and they have seen radicant shoots of this description, 30 feet long, not thicker than a pack-thread. The plants have all roundish cordate leaves, more or less membranaceous, generally glabrous, upon slender petioles; their inflorescence is an elongated supra-axillary raceme, with small glabrous flowers; their somewhat globular fleshy drupes contain a spherical, smooth or tubercu-